

**Notice of Allowability**

Application No.

10/642,719

Examiner

James M McAleenan

Applicant(s)

MACLEAN, THOMAS

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 18 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

The instant invention is deemed to be directed to an unobvious improvement over Maguire et al. (U.S. Patent Number 6,089,821) (see Figure 2 and Col. 2, lines 65-67 and Col. 3, lines 1-16). Maguire et al. discloses a turbine casing (50) having a plurality of turbine shroud assemblies. Maguire et al. discloses a base casing (62) having a forward mounting flange, an aft mounting flange and at least one channel defined there-between. Maguire et al. discloses a rim (64) on the base casing proximate to the channel. Maguire et al. discloses a U shaped manifold (66) coupled to the base casing (see Figure 2 and Col. 3, lines 1-16). The improvement comprises the combination of the method of (regarding claim 1): a turbine casing having a base casing, wherein a rim is machined on the base casing proximate at least one channel; 2) a ring member coupled to the base casing with an interference fit such that the rim is at least partially received within a groove formed within the ring member. The improvement comprises the combination of (regarding claim 6): 1) a base casing having a body positioned between a forward and aft flange, wherein the body includes at least one channel defined therein; 2) an annular ring member coupled to the base casing, wherein the ring member is configured to thermally expand at a rate substantially identical to a rate of the thermal expansion of the forward and aft flanges. The improvement comprises the combination of (regarding claim 13): 1) a base casing of a turbine section having a body positioned between a forward and aft flange, wherein the body includes at least one channel defined therein; 2) an annular ring member coupled to the base casing, wherein the ring member is configured to thermally expand at a rate substantially identical to a rate of the thermal expansion of the forward and aft flanges.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "comments on Statement of Reasons for allowance."

### **PRIOR ART**

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 1 patent.

Nash et al. (U.S. Patent Number 4,840,026) is cited to show similar airfoil features as claimed by Applicant's invention.

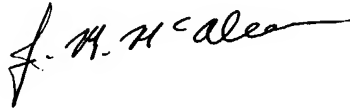
### **CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner James M. McAleenan whose telephone number is (703) 308-2827. The examiner can normally be reached on Monday thru Friday from 9:00 am to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (703) 308-1044. The fax number for this Group is (703) 872-9306.

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An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



James M. McAleenan  
Patent Examiner  
Art Unit 3745

9/27/04



EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

9/29/04